UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,992	03/21/2002	Rodolfo Mann Pelz	10191/1969	8032

26646 7590 05/03/2004

KENYON & KENYON
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER	
WEST, JEFFREY R	

ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/913,992	PELZ ET AL.	
	Examiner	Art Unit	
	Jeffrey R. West	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 February 2004* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed arrangements for new component detection, software error detection, etc. must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 11-14 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,185,491 to Gray et al. in view of U.S. Patent No. 6,246,935 to Buckley.

Gray discloses a service element that belongs to a distributed system as a component among a plurality of components of a distributed system, including a communication element, that are independent of one another and interconnected by a bus (Figure 2) comprising an arrangement for configuring (i.e. selecting desired functions and settings) other components, an arrangement for equipping (i.e. activating) the other components, an arrangement for maintaining (i.e. maintaining operation at selected setting) the other components (column 5, lines 44-62 and Figure 9), and an arrangement for performing an emergency function (column 3, lines 52-54).

Gray discloses an arrangement for detecting a new component and for integrating the new component into the distributed system (column 6, lines 28-53) as well as an arrangement for operating a display device to represent information about a configuration (column 5, lines 60-64 and Figure 9) and transfer information about the distributed system to a user of the distributed system (column 6, lines 32-64).

Gray also discloses an arrangement including a communication element for loading new software interfaces for the plurality of components (column 4, line 65 to column 5, line 6 and column 6, lines 34-40 and 62-64).

As noted above, the invention of Gray teaches all of the features of the claimed invention except for including an arrangement for performing an error diagnosis of software running on the components, in accordance with a predetermined value, and, in case of an error, correcting the software as well as an arrangement for upgrading the components.

Buckley teaches a vehicle instrument panel computer interface and display including a central control node that communicates to a plurality of other components (column 2, lines 57-62 and column 3, lines 29-51) and performs an error diagnosis of software running on the plurality of components (column 8, lines 46-63). Buckley also teaches determining the occurrence of an error in the software using a cyclic redundancy check with a checksum value (column 7, lines 38-52 and column 9, lines 28-38) (see also FOLDOC Free On-Line Dictionary of Computing, "cyclic redundancy check"), memory check (column 9, lines 38-55) and newly downloaded software check (column 10, 27-33), and, upon the occurrence of an error, correcting the software to maintain correct operation (column 9, lines 36-37 and 41-42 and column 10, lines 27-33) through the updating/upgrading the components of the system (column 10, lines 27-43).

It would have been obvious to one having ordinary skill in the art to modify the invention of Gray to include an arrangement for performing an error diagnosis of software running on the components, in accordance with a predetermined value, and, in case of an error, correcting the software, as taught by Buckley, because the combination would have provided a further method for determining when new updates are required, such as the updates disclosed by Gray, and, as suggested by Buckley, provided a method for determining whether the software of the devices are updated, complete, and correct thereby insuring correct operation of the distributed system (column 8, lines 46-65, column 9, lines 28-30 and column 10, lines 30-33).

It would have been obvious to one having ordinary skill in the art to modify the invention of Gray to include an arrangement for upgrading the components, as taught by Buckley, because, as suggested by Buckley, the combination would have provided a method for insuring accurate operation by keeping the system current using the newest firmware and software to form a system that is adaptable, upgradeable, cost efficient, and open to a variety of software (column 2, lines 28-31 and column 10, lines 27-43).

4. Claims 15, 16, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of Buckley and further in view of U.S. Patent No. 6,330,499 to Chou et al.

As noted above, the invention of Gray and Buckley teaches many of the features of the claimed invention including a communication element for loading new software interfaces for the plurality of components, but does not specify that the communication element includes a transceiver station communicating over a radio channel or including an arrangement for allowing a remote diagnosis of the plurality of components of the distributed system and a communications element for, in the case of a serious functional error, contacting a service provider.

Chou teaches a system and method for vehicle diagnostics and health monitoring including an in-vehicle computing system (column 2, lines 55-63) connected to a plurality of elements on a bus (column 3, lines 33-37 and column 6, lines 55-56) and an arrangement for allowing a remote diagnosis of the system

(column 3, lines 15-31) and a communications element for, in the case of a serious functional error, contacting a service provider (column 5, lines 16-24 and column 7, lines 4-26). Chou also teaches coupling the processor through a communicating transceiver for communicating over a radio channel to further devices such as a notebook computer (column 3, lines 47-53).

It would have been obvious to one having ordinary skill in the art to modify the invention of Gray and Buckley to specify that the communication element includes a transceiver station communicating over a radio channel, as taught by Chou, because Chou suggests that RF communication is one of a plurality of common communication means for interfacing to a plurality of devices thereby providing the user with desired method to communicate with the other devices. It also would have been obvious to include an arrangement for allowing a remote diagnosis of the plurality of components of the distributed system and a communications element for, in the case of a serious functional error, contacting a service provider, as taught by Chou, because the combination would have provided a method for adhering to space constraints of the system while still providing detailed monitoring and diagnostic functions to insure correct system operation and, as suggested by Chou, aided the user of the system by providing trouble-shooting, diagnosis, tracking, and recommendations, as well as prevented serious consequences (column 1, lines 18-30) and provided emergency responses to an emergency condition, such as the condition indicated by the emergency arrangement of Gray (column 7, lines 22-26).

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of Buckley and further in view of U.S. Patent No. 4,866,713 to Worger et al.

As noted above, the invention of Gray and Buckley teaches many of the features of the claimed invention including determining the occurrence of an error in the software using a cyclic redundancy check with a checksum value (column 7, lines 38-52 and column 9, lines 28-38), however, the combination does not specify that this error diagnosis is performed at a predefined time interval.

Worger teaches an operational function checking method and device for microprocessors comprising performing a cyclic redundancy check at predefined time intervals (i.e. periodically) (column 4, lines 24-29).

It would have been obvious to one having ordinary skill in the art to modify the invention of Gray and Buckley to specify that the error diagnosis is performed at a predefined time interval, as taught by Worger, because the combination would have provided a method for determining proper operation periodically over operation of the device to insure accurate operation is being performed and, as suggested by Worger, the combination would have complied with operation of the system in carrying out the testing method (column 4, lines 24-29).

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of Buckley and further in view of U.S. Patent No. 4,843,557 to Ina et al.

As noted above, the invention of Gray and Buckley teaches many of the features of the claimed invention including connecting a plurality of components to a bus in a

vehicle system, however, the combination does not specify that this bus includes an optical wiring system.

Ina teaches connecting a plurality of components to a bus in a vehicle system, wherein the bus includes a common optical wiring system (column 2, lines 58-65).

It would have been obvious to one having ordinary skill in the art to modify the invention of Gray and Buckley to include specifying that the bus includes an optical wiring system, as taught by Ina, because Ina suggests a well-known, conventional system for serial communication between components in a vehicle system as would be desirable by the user for implementation with common device interfaces in the invention of Gray and Buckley (column 2, lines 58-65 and column 10, lines 23-24).

Response to Arguments

7. Applicant's arguments with respect to claims 11-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,282,469 to Rogers et al. teaches computerized automotive service equipment using multipoint serial link data transmission protocols including RF communication.

U.S. Patent No. 6,198,253 to Kurle et al. teaches a smart battery with maintenance and testing functions, communications, and display including periodic CRC testing.

U.S. Patent No. 5,835,873 to Darby et al. teaches a vehicle safety system with safety device controllers connected over an electrical and/or optical wiring bus.

U.S. Patent No. 5,983,161 to Lemelson et al. teaches a GPS vehicle collision avoidance warning and control system including a communicating GPS radio transceiver communicating over a radio channel.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (703)308-1309. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703)308-1677. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

jrw
April 26, 2004

MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800